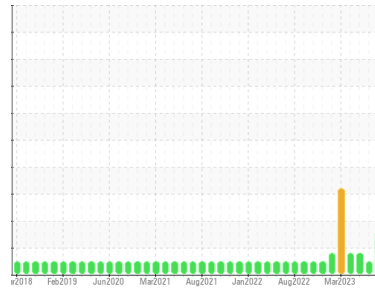




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area
(YA133459)

Machine Id
10643C

Component
Natural Gas Engine

Fluid
PETRO CANADA DURON GEO LD 15W40 (32 QTS)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

The iron level is abnormal. The chromium level is abnormal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0111034	GFL0111059	GFL0098537
Sample Date	Client Info		08 May 2024	06 Mar 2024	21 Oct 2023
Machine Age	hrs	Client Info	19129	18534	17801
Oil Age	hrs	Client Info	1328	733	1646
Oil Changed	Client Info		Not Chngd	Not Chngd	Changed
Sample Status			ABNORMAL	NORMAL	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	▲ 53	41	41
Chromium	ppm	ASTM D5185m >4	▲ 7	5	5
Nickel	ppm	ASTM D5185m >2	1	1	<1
Titanium	ppm	ASTM D5185m	<1	0	0
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >9	6	6	5
Lead	ppm	ASTM D5185m >30	5	4	6
Copper	ppm	ASTM D5185m >35	22	22	▲ 46
Tin	ppm	ASTM D5185m >4	<1	1	<1
Vanadium	ppm	ASTM D5185m	<1	<1	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	6	13	0
Barium	ppm	ASTM D5185m 5	0	0	0
Molybdenum	ppm	ASTM D5185m 50	60	54	55
Manganese	ppm	ASTM D5185m 0	1	1	1
Magnesium	ppm	ASTM D5185m 560	559	574	573
Calcium	ppm	ASTM D5185m 1510	1639	1590	1578
Phosphorus	ppm	ASTM D5185m 780	754	752	708
Zinc	ppm	ASTM D5185m 870	972	1010	940
Sulfur	ppm	ASTM D5185m 2040	2430	2361	2206

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	7	5	6
Sodium	ppm	ASTM D5185m	6	6	9
Potassium	ppm	ASTM D5185m >20	5	6	10

INFRA-RED

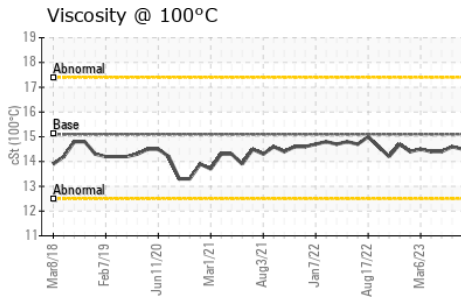
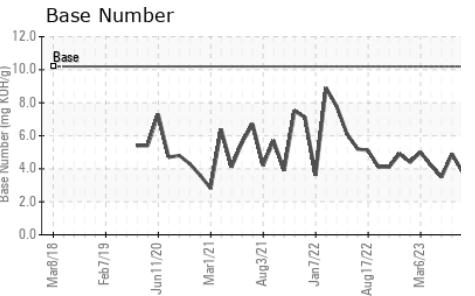
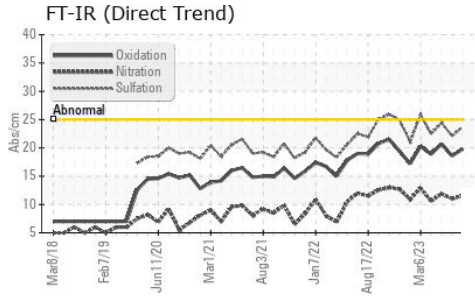
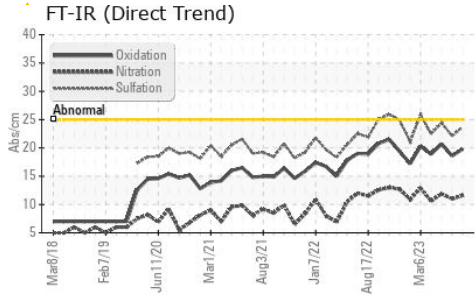
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0	0	0
Nitration	Abs/cm	*ASTM D7624 >20	11.6	11.0	11.9
Sulfation	Abs/.1mm	*ASTM D7415 >30	23.7	22.1	24.4

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	19.8	18.6	20.7
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	3.8	4.9	3.5



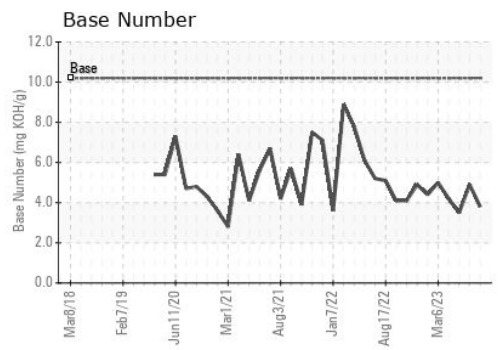
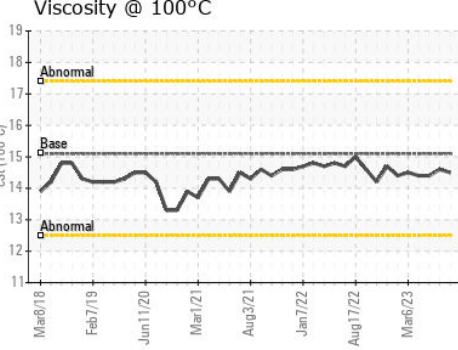
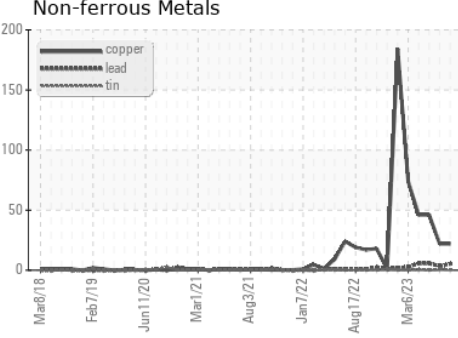
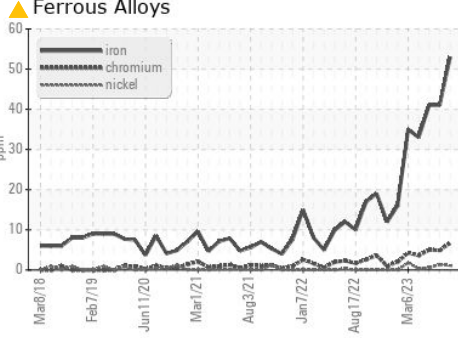
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	14.5	14.6

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0111034
Lab Number : 06174931
Unique Number : 11020984
Test Package : FLEET
Received : 09 May 2024
Tested : 10 May 2024
Diagnosed : 13 May 2024 - Sean Felton

GFL Environmental - 006 - Wilmington
 3618 US Highway 421 N
 Wilmington, NC
 US 28401
 Contact: Eric Wood
 eric.wood@gflenv.com
 T: (717)723-1956
 F: (910)762-6880

To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)